

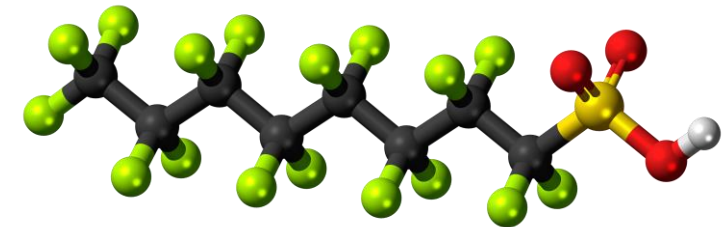
NR 809 Updates

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PFAS – What is it?

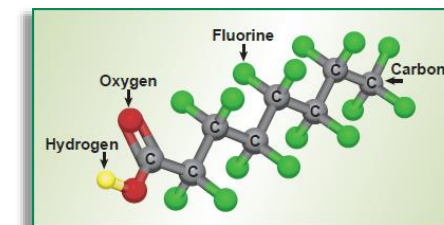
- **Per and Polyfluoroalkyl Substances**

- *Family of 4,000+*
- *PFOA, PFOS, PFHxS, GenX, etc*



- **Manmade**

- *Manufactured for decades ~ 1940s*
- *Slippery, water and heat resistant*

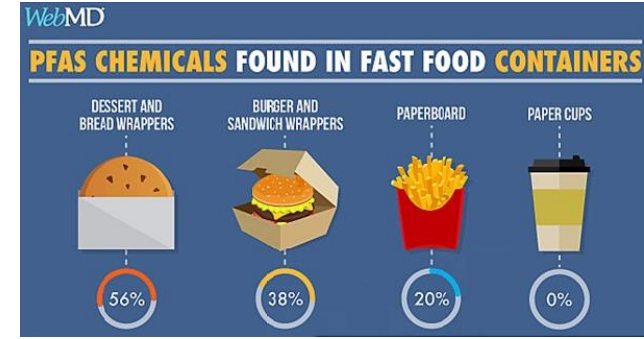


What are the concerns?

- Widespread nature
- Mobility
- Toxicity
- Health effects
- Environmental standards

PFAS – Where is it found?

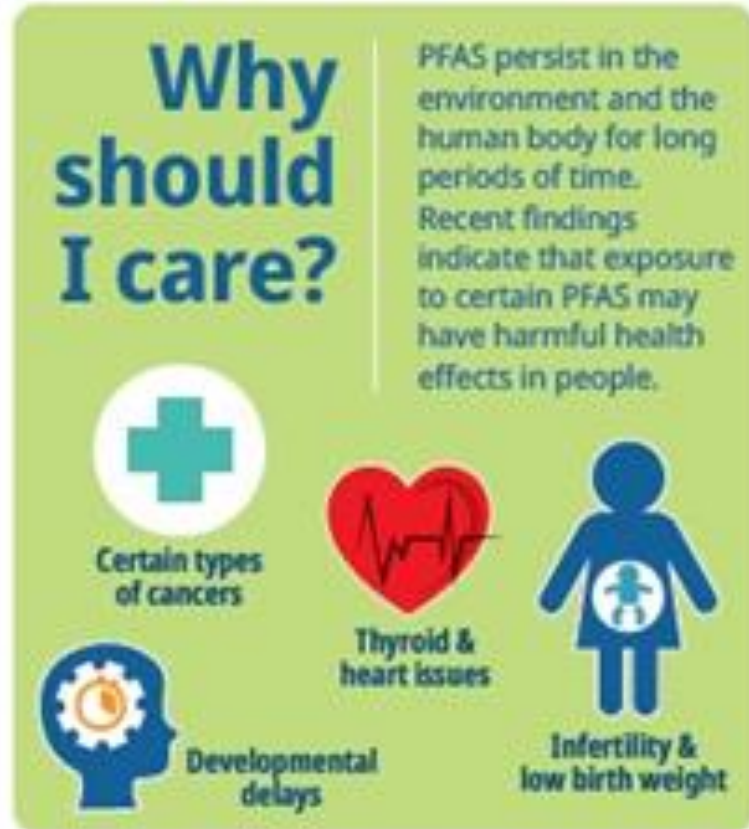
- Where is/was it used?
 - Food packaging
 - Teflon coated cookware
 - Water repellent coatings
 - Stain repellents
 - Leather production
 - Chrome plating
 - Coated paper
 - Firefighting foam



PFAS – What's the Problem?

- Does not naturally degrade or break down in the environment
- Moves readily through the subsurface in potentially large plumes
- Bio-accumulates in humans, fish, and wildlife
- Produces health effects is small concentrations (parts per trillions)

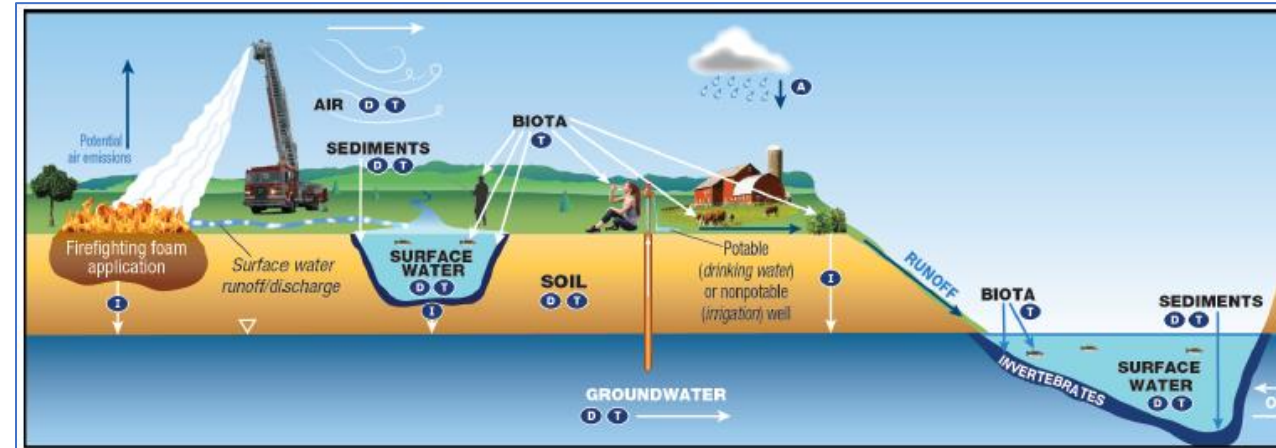
PFAS and Health



- PFAS may affect people's health:
 - Childhood developmental delays
 - Decreased fertility in women
 - Hormonal disruption
 - Increased cholesterol levels
 - Immune system impacts
 - Increased risk of cancer

PFAS – Exposure

- Ingestion is the major exposure pathway
 - Contaminated drinking water
 - Food – packaging and growing conditions
 - Degradation of consumer products
 - E.g. water-resistant clothes and nonstick cookware
- Occupational settings where PFAS is used or manufactured



NR 809 – MCL Requirements for PFOS & PFOA

- MCL - 70 ng/L (parts per trillion) for total “PFOS and PFOA”
- Per s. NR 809.20 (1)
 - MCL exceedance will result in public notice and corrective action schedule
- DNR may require public notice if state health-based recommended standard is exceeded
 - [WI DHS Information for PFAS Recommended Standards](#)

Initial Monitoring Requirement Schedule

- Based on population served by system
 - Pop. >50K October – December 2022
 - Pop. 10K-49,999 January – March 2023
 - Pop. 10,000-300 April – June 2023
 - Pop. 299-50 July – September 2023
 - Pop. <50 October – December 2023

PFAS Monitoring Requirements – NR 809

- Initial Monitoring – Quarterly, may be reduced with potential waivers.
- Routine Monitoring – Every three years.
- Increased Monitoring – Quarterly with PFAS detections.
- Waivers – Criteria includes no PFAS detections, no potential contaminant sources, well vulnerability.

Monitoring Waivers

- Waivers will be handled in similar ways as other SOC's
 - An *initial monitoring* waiver may be granted if the first two samples are below the detection limit **OR** after one initial sample below detection limit and the well source meets all other waiver criteria.
 - A waiver may be granted from *routine monitoring* if the well source completes initial or increased compliance monitoring, and the well source meets all waiver criteria.
 - A monitoring waiver may be granted for a period up to six years.

Monitoring Waivers - Continued

- A waiver evaluation includes the following criteria:
 - A department determination whether a contaminant has not been used within a watershed or zone of influence.
 - If a contaminant has been used or the use is unknown:
 - Previous analytical results
 - The proximity of the public water system to a potential point source of contamination including spills, waste landfills, waste treatment and storage facilities, airports, military bases, and fire training facilities.

Initial Monitoring Waivers - Summary

- If *no detect* is found in the first sample **AND** your system currently has an SOC waiver, remaining initial monitoring samples will be waived.
- Systems with *low level detects* may also be considered for waivers through our standard waiver process.

EPA UCMR 5 PFAS Sampling

- 203 Public Water Systems in WI will sample under UCMR 5.
- Sample collection from 2023-2025.
- UCMR5 and NR 809 monitoring may meet both requirements with the same samples **if**:
 1. The monitoring periods for both requirements overlap.
 2. The laboratory can report to DWS electronically while reporting to EPA for UCMR 5.

EPA UCMR 5 PFAS Sampling - Continued

- How to change an EPA UCMR 5 Monitoring Schedule:
- Large systems (Pop. > 10,000) can make schedule changes by accessing their EPA CDX UCMR 5 account.
- Small and Medium systems can make schedule changes by contacting the UCMR 5 contact at UCMR5@glec.com or 1-800-949-1581.
- Monitoring schedule updates need to be made by December 31, 2022.

PFAS Sampling – Best Practices

- Contact laboratory early and coordinate sample collection and analysis dates.
 - [Wisconsin labs approved for PFAS sampling.](#)
- Sample early or coordinate with laboratory early in monitoring period.
- Follow sampling protocol provided by your lab.
- During the summer, ship with enough ice to ensure sample arrives at correct temperature.
- Arrange shipping with transport vendor.

Department of Health Service Recommended PFAS Standards

Summary of DHS' Recommended Groundwater Standards for PFAS

PFOA = 20*	PFNA = 30	PFUnA = 3,000
PFOS = 20*	PFHxS = 40	PFBA = 10,000
FOSA = 20*	GenX = 300	PFTeA = 10,000
NEtFOSA = 20*	PFDA = 300	PFHxA = 150,000
NEtFOSAA = 20*	PFDoA = 500	PFODA = 400,000
NEtFOSE = 20*	DONA = 3,000	PFBS = 450,000

* DHS recommends a combined standard of 20 ng/L for PFOA, PFOS, FOSA, NEtFOSA, NEtFOSAA, and NEtFOSE. All recommendations are shown as nanograms of PFAS per liter of water (ng/L), which is equivalent to parts per trillion (ppt).

PFAS Hazard Index

Wisconsin Department of Health Services (WI DHS)



$$\frac{\text{Level of PFAS 1 found in water}}{\text{DHS Recommended Standard for PFAS 1}} + \frac{\text{Level of PFAS 2 found in water}}{\text{DHS Recommended Standard for PFAS 2}} + \dots = \text{Hazard Index}$$

Hazard Index ≥ 1 Triggers a Public Noticing Requirement

EPA Health Advisory Levels

- June 15, 2022, EPA issued new HALs for PFOA, PFOS, PFBS, and HFPO-DA
- Interim HALs
 - PFOA – 0.004 ppt
 - PFOS – 0.02 ppt
- Updated Final HALs
 - HFPO-DA (GenX) – 10 ppt
 - PFBS – 2,000 ppt

EPA Health Advisory Levels - Continued

- Interim HALs provide information to states and water systems before National Primary Drinking Water regulation for PFAS takes effect
- Proposed MCLs are expected to be announced late 2022
 - States are required to adopt these MCLs or set a stricter MCL

EPA Health Advisory Level

- DNR and DHS will continue to use DHS health-based recommendations in the interim
- EPA and DHS info sheets are linked below
 - [WI DHS Information About PFAS](#)
 - [EPA Factsheet for Communities](#)
 - [EPA Factsheet for Water Systems](#)
 - [EPA Detailed Q&A](#)

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OFF THE RECORD"